DOCUMENT RESUME

ED 474 824 UD 035 570

AUTHOR	Zhan, Min; Sherraden, Michael
TITLE	Effects of Mothers' Assets on Expectations and Children's Educational Achievement in Female-Headed Households. Working Paper.
INSTITUTION	Washington Univ., St. Louis, MO.
REPORT NO	CSD-WP-02-9
PUB DATE	2002-05-00
NOTE	24p.; Produced by the Center for Social Development.
AVAILABLE FROM	Center for Social Development, George Warren Brown School of Social Work, Washington University, One Brookings Drive, Campus Box 1196, St. Louis, MO 63130. Tel: 314-935-7433; Fax: 314-935-8661; e-mail: csd@gwbmail.wustl.edu; Web site: http://www.gwbweb.wustl.edu/csd.
PUB TYPE	Reports - Research (143)
EDRS PRICE	EDRS Price MF01/PC01 Plus Postage.
DESCRIPTORS	*Academic Achievement; Educational Attainment; Elementary Secondary Education; *Family Income; Fatherless Family; Grades (Scholastic); Graduation; Homeowners; *Mothers; *One Parent Family; *Parent Attitudes
IDENTIFIERS	Savings Accounts

ABSTRACT

This study examined the effects of mothers' assets (i.e., home ownership and savings) on their expectations and their children's educational achievement in female-headed households. The study used data from the National Survey of Families and Households, which involved interviews with a national sample of 13,017 respondents (including 3,374 blacks and single parent families). The dependent variables were measures of children's educational achievements (academic performance and high school graduation). Mothers' expectations for their children's educational achievement were measured with a question that asked how much education they believed their children would probably get. Data analysis indicated that single mothers' assets had significant positive effects on their expectations and their children's educational achievement, and mothers' expectations had significant effects on children's outcomes. Savings had significant effects on the probability of high school graduation, and home ownership had significant effects on academic performance. The positive effects of household income on children's outcomes occurred mainly through mothers' assets. (Contains 65 references.) (SM)

Reproductions supplied by EDRS are the best that can be made
from the original document.

ED 474 824

Working Paper

Effects of Mothers' Assets on Expectations and Children's Educational Achievement in Female-Headed Households

Min Zhan and Michael Sherraden

Working Paper 02-9

May 2002

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☒ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY
M. Sherraden
George Warren Brown School of Social Work
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
1

Center for Social Development

George Warren Brown School of Social Work

UD 035 570

BEST COPY AVAILABLE

Effects of Mothers' Assets on Expectations and Children's Educational Achievement in Female-Headed Households

Min Zhan, PhD
Assistant Professor
School of Social Work
University of Illinois at Urbana-Champaign
1207 W. Oregon
Urbana, IL 61801
mzhan@uiuc.edu

Faculty Associate
Center for Social Development
Washington University in St. Louis

Michael Sherraden, PhD
Benjamin E. Youndahl Professor of Social Development
George Warren Brown School of Social
Washington University in St. Louis

Director
Center for Social Development
Washington University in St. Louis

Working Paper 02-9

May 2002

Center for Social Development
George Warren Brown School of Social Work
Washington University
One Brookings Drive
Campus Box 1196
St. Louis, MO 63130
tel 314-935-7433
fax 314-935-8661
e-mail: csd@gwbmail.wustl.edu
http://gwbweb.wustl.edu/csd

Abstract

This study examines the effects of mothers' assets (home ownership and savings) on their expectations and children's educational achievement in female-headed households. Through the analysis of data from the National Survey of Families and Households (NSFH), results indicate that single mothers' assets have positive effects on children's educational achievement, and this effect is partially mediated through expectations. The study also finds that the positive effects of household income on children's outcomes occur mainly through mothers' assets. These results lend support for expansion of asset-based policies for poor women with children.

Key words: Assets, expectations, educational achievement, single mothers

Mother-only families have become increasingly common during the past three decades. Whereas in 1960 only about 9 percent of families with children in the United States were headed by non-married women, by 1999 the number was over 20 percent (U.S. Bureau of the Census, 1961; 2000). In the meantime, female-headed households consistently comprised a large proportion of poor households. Throughout the 1980s and 1990s, female-headed families with children were five times more likely to be poor than two-parent families with children (Furstenberg, 1990; Garfinkel & McLanahan, 1986; Nichols-Casebolt & Krysik, 1997; U.S. Bureau of the Census, 2001). Being raised in a single-parent family has been associated with negative socioemotional outcomes for children (McLanahan, 1997), negative educational outcomes being one of them. Compared with children from two-parent families, children raised in single-parent families have been shown to have lower test scores, lower school attendance, fewer years of schooling and higher rate of dropping out of high school (Astone & McLanahan, 1991; Hauser & Featherman, 1976; Hauser & Pang, 1993; McLanahan & Sandefur, 1994). Educational achievements is one of the best predictors of factors such as occupational status and earnings that contribute strongly to a child's future economic well-being (Haveman & Wolfe, 1994; McLanahan & Sandefur, 1994).

It is important to examine intergenerational effects of parental characteristics on children's schooling in these families. Although most researchers would agree that children of female-headed households are more vulnerable, not every child from these families has low educational achievement. Most previous research has focused on negative consequences of female-headed households compared with other family types, but relatively little attention has been paid to within-group variations (Richards & Schmiege, 1993). What accounts for the range of children's well-being among female-headed households? Examining intergenerational effects within similar types of households may be helpful in identifying resources and strengths that some female-headed families may have to buffer risks of poverty. If resources and strengths within this family group can be identified, then future policy can target these to mitigate intergenerational vulnerability among these families.

Studies examining parental characteristics and children's well-being have focused on income, education, and other parental characteristics. Little effort has been made to examine the effects of assets on children's well-being, especially in low-income families. Research on economic assets as an inequality issue has become more prominent (Oliver & Shapiro, 1995; Sherraden, 1991; Wolff, 1995). Among the emerging area of wealth studies, income and assets are treated as two connected but distinct concepts. There is reason to hypothesize that assets holding may have independent and possibly different intergenerational effects than those of income (Sherraden, 1991) and empirical evidence generally supports this possibility (Page-Adams & Sherraden, 1997; Scanlon & Page-Adams, 2001). However, in most studies, income is the measure of impact of parental economic resources on children. In the few studies that included assets, assets are usually treated as one component of the parental income "package." In these studies, effects of assets are not tested specifically, and are not considered theoretically distinct. Especially among low-income families, effects of parental assets on children's outcomes and possible mechanisms of such effects have seldom been examined.

To address these issues, this study examines the relationship between mothers' assets on their children's educational achievement in female-headed households. Specifically, three main questions are examined: 1) What is the relationship between mothers' assets and their children's educational achievement? 2) What is the relationship between mothers' assets and their educational expectations for their children? 3) Do mothers' expectations mediate the effects of their asset holding on children's educational achievement?

Previous Scholarship

Theory

A large body of work from an economic deprivation perspective suggests the importance of family economic resources in children's well being (Becker, 1991; 1993; Becker & Tomes, 1986; 1979). Consistent with this perspective, Sherraden (1991) makes a distinction between income and assets in terms of economic resources accumulation, and highlights the importance of assets rather than income and level of consumption. Assets are important because they can bring security to its owners, especially in times of hardship or economic stress such as unemployment, illness, or family breakup. Possibly more important, the meaning of assets extends beyond providing a flow of income. "Most people use income for day-to-day necessities, by contrast, assets often bring income, power, and independence" (Oliver & Shapiro, 1995, p.32). Command over resources can change people's cognitive schemata and enhance their life chances. Assets can bring not only income, but also a stake and position in the society for the owners. Sherraden (1991) suggests that assets may have a wide range of positive personal and social effects on well-being beyond consumption. These effects may include greater future orientation, stimulated development of other assets, improved household financial stability, greater focus and specialization, a foundation for risk-taking, increased personal efficacy, increased social influence, increased political participation and enhanced welfare of offspring.

Of particular relevance in this study is the possibility that assets may enhance the welfare of offspring. First, asset holding is more stable across generations than is level of income. Sherraden suggests that of all the forms of influence of parents on their children, financial assets are the easiest to transmit (1991, p.123). Second, as mentioned above, assets are an important cushion for many families to survive economic crisis, therefore assets holding can reduce negative effects of unanticipated income losses on children. Third, assets accumulation may enhance personal efficacy and create an orientation toward the future. Sherraden theorizes that assets impact people's attitudes and behaviors, and the effects of assets may be different from the effects of income. For example, homeowners tended to be higher in life satisfaction, self-esteem (Rossi & Weber, 1996) and more likely to be involved in community improvement activities (DiPasquale & Glaeser, 1999; Rossi & Weber, 1996). Assets may have positive effects on expectations and confidence about the future, and help people make specific plans with regard to work and family. Perhaps even small asset accumulations may create large effects. For example, in one study based on the Panel Study of Income Dynamics (PSID), savings and house values had significant and positive effects on attitudes and behaviors such as prudence, efficacy, horizons, and connectedness (Yadama & Sherraden, 1996). Moreover, some attitude changes may lead to other social, economic and intergenerational outcomes (Scanlon, 2001). For example, Shobe and Page-Adams (2001) highlight the independent and mediating role of future

orientation and suggest that assets may help people first shape hopes and plans, which in turn lead to positive social and economic outcomes. According to this view, parents with assets tend to perceive a brighter future for their children than those who do not hold any assets, which in turn may positively affect parenting behaviors and investment, and thus children's educational attainment. This argument is consistent with socialization perspective, such as role model theories (Mead, 1934; Cohen, 1987) and culture of poverty theories (Lewis, 1966; Murray, 1984; Wilson, 1987), which claim that low economic resources reduce ability to be good parents due in part to transfer negative attitudes and behaviors to children.

Evidence

While it is well documented that parental income has positive effects on children's well-being, fewer studies have analyzed the role of parental assets, especially among low-income families. Most existing studies that examine intergenerational effects of assets have focused on educational achievements of children. For example, Alwin and Thornton (1984), using data from an 18-year (1962-1980) longitudinal study of white families and children in the Detroit metropolitan area, find positive and significant effects of a measure combining income and assets on the amount of completed schooling. Similarly, a study using the PSID by Hill and Duncan (1987) reports that parental income from assets is positively and significantly related to completed schooling. Some recent studies have found stronger effects of parental financial assets than of income. For example, Mayer (1997), using data from both the PSID and the National Longitudinal Survey of Youth, reports that investment income and inherited income explain more variance in children's educational achievement and outcomes than do total family income. Children also appear to benefit from living in household where parents are homeowners. Essen, Fogelman & Head (1977), in their study of 16,000 British youth, find that 16-year-old children of homeowners are statistically more likely to have higher math and reading scores than those living in public housing. Kane (1994) finds that homeownership increases high school graduation and college entry rates for African-American youths. These findings are consistent with those of Green & White (1997), in an analysis using four large, national data sets, report that, after controlling for education and income, children (17-18 years old) of homeowners are less likely than the children of renters to drop out of school. Aaronson (2000) also found that homeownership had positive impact on children's high school graduation, and this impact was driven partially by residential stability.

Other studies addressing the relationship between parental assets and children's well-being have found positive effects on children's savings behavior (Bernheim & Garrett, 1996; Lunt & Livingstone, 1992; Pritchard, Myers & Cassidy, 1989), the probability of adults children's home ownership (Henretta, 1984), and self-esteem among adolescents (Axinn, Duncan & Thornton, 1997; Whitbeck, Simmons, Conger, Lorenz, Huck & Elder, 1991). Studies haved also found that parental assets can help children avoid risks of teenage pregnancy (Green & White,1997; Scheuler-Whitaker & Pandey, 1998), and delay timing of marriage (Axinn & Thornton, 1992). Assets appear to reduce vulnerability to poverty for children in female-headed households (Cheng, 1995). Regarding mechanisms for transfer of asset effects, Henretta (1984) suggests that the positive effects of parental home ownership on adult children's home ownership may be mediated primarily through parental expectations.

Data and Methods

Subjects

The data for this study come from the National Survey of Families and Households (NSFH). NSFH wave 1 (1987-1988) consists of interviews with a national random sample of 13,017 respondents consisting of a main sample of 9,643 respondents, and an oversample of 3,374 respondents including blacks and single-parent families (Bumpass & Call, 1988). In collecting NSFH data, one adult per household was randomly selected to be the primary respondent, and one child was also randomly selected from each household as "focal child". A five-year follow-up survey (wave 2) of the sample was conducted between 1992 and 1995. From these data we extracted all female-headed households, which is a household unit consisting of an unmarried female partner and at least one dependent child aged 12 to 18 years old. One "focal child" was randomly selected from each household and the sample includes these children living in these households. The final sample for the study includes 591 children who are 12 to 18 years old. Children's high school graduation is from wave 2. All other variables used in this study are from wave 1.

Measurement

The dependent variables in this study are measures of children's educational achievements; we use their academic performance and high school graduation. Children's academic performance is measured by mothers' report of their children's grades from "mostly A's" to "mostly F's". This variable is reversed coded for analytical purposes, where higher scores indicate higher levels of academic performance. Children's high school graduation is measured at wave 2 as focal children's reports when they were 18 to 26 years old whether they received their high school diploma. Those focal children who were still attending high school at wave 2 have been excluded from the analysis. Mothers' expectations for their children's educational achievement is measured with the question "How much education do you think (child) will probably get?" from "less than high school" to "graduate degrees". This variable has been re-coded as four categories: 1=graduate from high school or less, 2=one to three years of college, 3=bachelor's degrees, 4=graduate degrees, with graduate from high school or less as the reference group.

Because of their potential influence on the outcome of interest, several control variables are included. These include mother's age, race/ethnicity (Black, White, and Hispanic, with White as a reference group), employment status (coded as 1 if mothers are employed), total household income, number of children and adults living in households, county poverty rate, age of children, and gender of children. For the logistic regression analysis of children's high school graduation, children's academic performance was also included as a control variable.

The independent variable, mother's assets is measured by home ownership and savings. Home ownership is measured dichotomously with the question "Do you own your own home?" with 1=yes, 0=no. Total value of savings includes amounts in savings accounts, savings bonds, IRAs, money market shares and CDs. Savings was re-coded as a categorical variable with 1=no reported savings, 2=$1 to $2,999, and 3= $3,000 or above, with no reported saving as the reference group.

Analyses

Ordinary Least Squares (OLS) regression is conducted to test the effects of mothers' assets on their expectations and children's academic performance, and effects of mothers' expectations on children's academic performance. Logistic regression analyses is used to examine the effects of mothers' assets and expectations on children's high school graduation.

A mediating variable is defined as a variable that "accounts for all or part of the effects of a given independent variable on a dependent variable." Four conditions must be met to establish mediation. First, the independent variable must directly affect the mediator. Second, the independent variable must directly affect the dependent variable. Third, the mediator must affect the dependent variable. And finally, the direct effect of predictors of the dependent variable must be less than effects through mediator variable (Cogineni, Alsup, & Gillespie, 1995, p. 58). The mediating effects of mothers' expectations on the causal link between mothers' assets and children's educational achievements is examined from the multiple regressions conducted.

Results

Descriptive Statistics

A demographic profile of the sample is given in Table 1. Of the 591 mothers, 56 percent are White, 33 percent are African American and the remaining 9 percent are Hispanic Americans. The average age of the mothers is 41. There are, on average, 2.1 children under 18 and 1.3 adults living in households. The average years of mothers' education completed is 12. About 25 percent have less than a high school degree, 43 percent have a high school diploma, and 32 percent have post-secondary education. At the time of interview, 67 percent of mothers are employed. The average proportion of families living under the poverty line in the counties where the sample resided is 10.7 percent.

Table 1: Characteristics of the Sample (N=591)

Variables	Percentage or Mean (Standard Deviation)*
Children's academic performance	6.4 (1.1)
High School graduates	82%
Home owner (mother)	33%
Savings (mother)	
(No reported savings)	58%
$1-$2,999	27%
$3,000 or above	15%
Mothers' educational achievements	
(Less than high school)	25%
High school graduate	43%
Postsecondary education	32%
Mothers' expectations of children's education	
(High school graduate or below)	30%
One-year to three-year of college	26%
Bachelor's degree	33%
Masters' or doctorate degree	11%
Mothers' time investments in children	16.9 (4.3)
County poverty rate (%)	10.7 (6.1)
Household total income ($)	16,459 (15,269)
Number of children in households	2.1 (1.2)
Number of adults in households	1.3 (0.8)
Mothers' age	41 (7.6)
Mothers' race/ethnicity	
(White)	56%
African American	33%
Hispanic	9%
Mother being employed	67%
Children's age	12 (4)
Female Children	49%

*Mean (Standard Deviation) are presented for continuous variables, and percentages are presented for categorical variables.

Note: Reference groups are in parentheses.

Mean household income (excluding investment income) is $16,459. About one-third of the children's mothers (33 percent) own their home, and 42 percent have a savings account. Amounts in savings accounts is small; only 15 percent of respondents have saved $3,000 or above. One-third of mothers expect their children to finish high school; 26 percent expect their children to finish one to three years of college education; 33 percent expect their children to get a bachelor's degree; and 11 percent expect their children to get a graduate degree.

The mean value of older children's academic performance is 6.4, equivalent to a a grade point average (GPA) of B. Eighty-two percent of older children indicate at the second interview (wave 2) that they have graduated from high school. The distribution of this dichotomous variable is adequate for use in a logistic regression model (Morrow-Howell & Proctor, 1992). The sample consists of 49 percent female and 51 percent male children.

Effects of mothers' assets on children's educational achievement

Hierarchical multivariate models have been executed in which two indicators of children's educational achievements (academic performance and high school graduation) are regressed on the control variables and mothers' assets. The results are presented in Tables 2 and 3. Table 2 shows the results of the OLS regression model of children's academic performance. Findings indicate that the overall model is significant (R^2=.11, F=4.56, p<.0001) and explains about 11 percent of the variance in children's academic performance. Mothers' home ownership has a significant effect on children's academic performance. Compared with children of non-homeowners, children of homeowners have better academic performance. Amount of savings may be positively associated with children's academic performance, but falls short of statistical significance.

Table 2: Multiple Regression Analysis of Children's Academic Performance

Variables	Coefficients
Mothers' age	-.001
Mothers' race	
(White)	
African American	-.29*
Hispanic	-.11
Mothers being employed	.03
Number of children in household	-.09
Number of adults in household	-.06
County poverty rate	-.03*
Household income	.16
Children's age	-.08*
Female children	.70***
Mothers' education	
(Less than high school degree)	
High school graduates	13
Postsecondary education	.35*
Home ownership	.42**
Savings	
(No reported savings)	
$1-$2,999	.01
$3,000 or above	.03
R^2	.11
Adjusted R^2	.09
F	4.56***
df	15
N	563

*p<.05, **p<.01, ***p<.001
Note: Categories in parentheses are reference groups

Among the control variables, mothers' postsecondary education has a significant effect on children's academic performance. Compared with the children whose mothers had less than high school education, the children whose mothers had college education have higher grade point average (GPA). Compared with male children, the GPA of female children is significantly higher. African-American children have lower GPA compared with their White counterparts. As expected, the county poverty rate is negatively related to children's academic performance.

The results of logistic regression on children's high school graduation are presented in Table 3. The model is significant (χ^2=53.8, df=15, p<.0001). The results are that mothers' savings have significantly positive effects on children's high school graduation. Compared with children of mothers without savings, children whose mothers had savings of $3,000 or above are 1.3 times

more likely to graduate from high school. Mothers' home ownership may be positively related children's high school graduation, but the association is not statistically significant.

Table 3: Logistic Regression Analysis of Children's High School Graduation

Variables	Coefficients	Odds Ratio
Mothers' age	-.02	.98
Mothers' race		
(White)		
African American	-.47	.63
Hispanic	-.97	.38
Mothers being employed	-.06	.95
Number of children in household	-.16	.85
Number of adults in household	-.50*	.61
County poverty rate	.04	1.04
Log household income	.11	1.12
Children's age	.24*	1.27
Female children	.30	1.43
Children's academic performance	.53***	1.69
Mothers' education		
(Less than high school degree)		
High school graduates	.57	1.77
Postsecondary education	.69*	1.83
Home ownership	.10	1.1
Savings		
(No reported savings)		
$1-$2,999	.16	1.3
$3,000 or above	.26*	1.3
χ^2	53.8***	
df	15	
N	406	

*p<.05, **p<.01, ***p<.001

Note: Categories in parentheses are reference groups.

Mothers' education also had a positive and significant effect on children's high school graduation. Children whose mothers had college education were 1.8 times more likely to graduate from high school compared with those children whose mothers did not finish high school. Not surprisingly, children's academic performance was significantly linked to the probability of their high school graduation. The number of adults in the households was negatively related to the probability of children's high school graduation.

Effects of mothers' assets on their expectations for children's education

In order to examine the effects of mothers' assets on their expectations of children's education, mothers' expectations have been regressed on control variables and assets variables. The results indicate that the model is significant, and explains 21 percent of variance in the dependent variable (Table 4). Mothers who own a home have higher expectations than those who do not own a home, and mothers who have a savings account with $3,000 or above have higher expectations than those without a savings account.

Table 4: Multiple Regression Analysis of Mothers' Expectations

Variables	Coefficients
Mothers' age	-.001
Mothers' race	
(White)	
African American	-.27**
Hispanic	.11
Mothers being employed	-.19*
Number of children in households	-.02
Number of adults in households	-.11*
County poverty rate	-.006
Log household Income	.04
Children's age	-.07**
Female children	.23**
Mothers' education	
(Less than high school)	
High school graduates	.27*
Postsecondary education	.63***
Home ownership	.24**
Savings	
(No reported savings)	
$1-$2,999	.03
$3,000 or above	.27*
R^2	.21
Adjusted R^2	.19
F	9.6***
df	15
N	560

*p<.05, **p<.01, ***p<.001

Note: Categories in parentheses are reference groups.

Among the control variables, mothers' education, race, employment status, number of adults living in households, and children's age and gender are significantly related to mothers' expectations of their children's educational achievement. Compared with mothers without a high school degree, mothers with a high school degree have higher expectations, and mothers with postsecondary education have even higher expectations for their children's educational achievement. African American mothers have lower expectations than do White mothers. Somewhat surprisingly, employed mothers have lower expectations than non-employed mothers. The more adults living in the household, the lower mothers' expectations are. Finally, mothers of female children and younger children tend to have higher expectations for their children.

Effects of income versus assets

The above analyses indicate that income does not have significant effects on mothers' expectations or children's educational achievements. Previous studies, which have not included asset variables, have found significant effects of income on children's academic performance or high school graduation in female-headed households (Duncan, Brooks-Gunn, & Klebanov, 1994; Garfinkel & McLanahan, 1986; McLanahan, 1985; Shaw, 1982). To explore whether including asset variables affects the estimates for income, we have repeated the above regression analyses on children's educational achievements and mothers' expectations, but with the assets variable deleted. Table 5 shows the coefficients of mothers' income with and without asset variables. Results of these analyses indicates that, without controlling for savings and home ownership, household income has significant and positive effects on children's academic performance and high school graduation. Income also has significantly positive effects on mothers' expectations. The magnitudes of income coefficients are consistently larger in the models without asset variables.

Table 5: Estimated Coefficients of Income in Models With and Without Assets

Variables	Coefficients	
	With assets	Without Assets
Children's academic performance	.16	.18*
Children's high school graduation	.11	.42*
Mothers' expectations	.04	.11*

*p<.05, **p<.01, ***p<.001

Note: Categories in parentheses are reference groups.

Effects of mothers' expectations on children's educational achievement

In order to examine possible effects of mothers' expectations on children's outcomes, hierarchical multivariate models have been executed in which children's outcomes are regressed on the control variables, mothers' assets, and then mothers' expectations with their children. Results are presented in Tables 6 and 7. Because this study aims to examine how mothers' expectations mediate the relationship between mothers' assets and children's outcomes, Tables 6 and 7 include two estimates for each of the two children's outcome variables. For each dependent variable, Model I shows the effects of mothers' assets on children's outcomes,

excluding their expectations in the model, and Model II estimates the same effects including the latter in the model. The estimates of both models include the set of control variables (not shown in the tables).

Table 6 shows the effects of mothers' expectations on children's academic performance. The results indicate that the overall model is significant (R^2=.24, F=8.8, p<.0001). Mothers' expectations of their children's educational achievement have a significant effect on children's academic performance. Compared with children whose mothers expected them to finish high school or less, children whose mothers expected them to attend college are higher in their GPA, children whose mothers expected them to obtain a bachelor's degree are much higher in their GPA, and those children whose mothers expected them to get a graduate degree are even higher in their GPA. Table 6 also shows that after controlling for mothers' expectations, home ownership is still significantly related to children's performance, but the estimate declines from .42 to .27.

Table 6: Multiple Regression Analysis of Children's Academic Performance: A Comparison of Two Models

Variables	Coefficients	
	Model I	Model II
Home ownership	.42**	.27*
Savings		
(No reported savings)		
$1-$2,999	.01	.01
$3,000 or above	.03	.13
Mothers' expectations		
(High school or less)		
Some college		.56**
Bachelor's degree		1.07**
Master or doctorate degree		1.98***
R^2	.11	.24
Adjusted R^2	.09	.21
F	4.56***	8.8***
df	15	19
N	563	563

*p<.05, **p<.01, ***p<.001

Note: Categories in parentheses are reference groups.

Table 7 shows the results of logistic regression analysis on children's high school graduation. The model is significant (χ^2=71.2, df=19, p<.0001). Mothers' expectations of children's educational achievements are significantly linked to the probability of children's high school graduation. Compared with children whose mothers expected them to finish high school, children whose mothers expected them to go to college are 3.3 times more likely to graduate from high school; the children whose mothers expected them to get a bachelor's degree are 4.2

times more likely to graduate from high school; and the children whose mothers expected them to get a graduate degrees are14 times more likely to finish high school. After mothers' expectations are entered into the logistic model, mothers' savings ($3,000 or above) is still significantly associated with children's graduating from high school, but the coefficient decreases somewhat from .26 to .24.

Table 7: Logistic Regression Analysis of Children's High School Graduation: A Comparison of Two Models

	Model I		Model II	
Variables	Coefficients	Odds Ratio	Coefficients	Odds Ratio
Home ownership	.10	1.1	.05	.88
Savings				
(No reported savings)				
$1-$2,999	.16	1.3	.12	1.3
$3,000 or above	.26*	1.3	.24*	1.3
Mothers' expectations				
(High school or less)				
Some college			1.19**	3.3
Bachelor's degree			1.43**	4.2
Master or doctorate degree			2.64**	13.9
χ^2	53.8***		71.2***	
df	15		19	
N	406		406	

*p<.05, **p<.01

Note: Categories in parentheses are reference groups.

Summary and Discussion

Results of regression analyses indicate that mothers' assets have significant effects on their expectations and children's educational achievement, and mothers' expectations have significant effects on children's outcomes. After controlling for their expectations, effects of mothers' assets on children's educational achievements remain significant but coefficients are reduced. Therefore, mothers' expectations partially mediate the relationship between home ownership and children's academic performance, and also partially mediate the effects of mother's savings on children's high school graduation.

Specifically, savings have significant effects on the probability of children's high school graduation, and home ownership has significant effects on children's academic performance. These results imply that additional studies should examine differential intergenerational effects of different types of assets.

Home ownership does not have a significant effect on children's high school graduation in this study, which is not consistent with findings from previous studies (Essen, Fogelman & Head,

1977; Green & White, 1997; Kane, 1994). Poor quality of housing owned by the respondents in this study may contribute to this inconsistency. It may be that housing quality rather than home ownership mediated the effects of home ownership on children's high school graduation. It also suggests the importance of considering neighborhood effects when examining the effects of assets.

Turning to effects of savings, only savings of $3,000 or above have significant effects on children's outcomes, compared with mothers without a savings account, who constitute over half of the study's respondents. Lower savings ($1 to $2,999) do not have significant effects. It seems that not merely ownership of a savings account, but also the amount of savings in the account, may matter. Perhaps there is some threshold in asset accumulation above which positive effects may occur (a possibility raised by Sherraden, 1991). More studies are need in this possible lumpiness of asset effects.

Mothers' assets, both home ownership and savings, are also positively and significantly related to their expectations for children's schooling. This may be evidence that assets have positive attitudinal effects and help develop greater future orientation (Sherraden, 1991; Yadama & Sherraden, 1996). Parents' expectations of their children's success in life is not only an expression of their perception of the world around them but also an expression of their assessment of their ability to supervise and invest in the future of their children. Therefore, the positive effects of assets on parents' expectations indicate that assets may change the way people view the world, and perhaps also the way the world responds to them.

The positive effects of mothers' assets on their expectations are important in a very practical sense. Numerous studies find positive impacts of parental expectations or aspiration for their children's educational achievement (e.g., Astone & McLanahan, 1991; Axinn, Duncan, & Thornton, 1997; Coleman, 1988; Furstenberg & Hughes, 1995; Hanson, McLanahan, & Thomson, 1997; Reynolds & Gill, 1994; Smith, Beaulieu, & Seraphine, 1995). The results of this study also find that the effects of mothers' assets on children's educational outcomes operate partially through expectations. This may provide some insight into mechanisms that may be associated with parental assets on children's well-being.

Previous research suggests that parents' assets may have stronger effects on children's outcomes than does income (Mayer, 1997), and may provide effects beyond that of income (Yadama & Sherraden, 1996). This study finds that, when asset variables are included in the regression, income does not have significant effects on children's educational achievements or mothers' expectations. However, without controlling for savings and home ownership, household income has significant effects on children's academic performance and high school graduation, as well as mothers' expectations. It appears that coefficients for income are biased, and the models are poorly specified, when asset variables are omitted (Cho, 1996; Ramanathan, 1995). Future studies should consider including assets when examining impacts of financial resources on well-being.

Several findings of the effects of control variables are worth mentioning. First, results of this study indicate that mothers' education, especially higher education, significantly affects the probability of children's high school graduation and children's academic performance. These

findings are consistent with many previous studies (e.g., Alwin & Thornton, 1984; Brooks-Gunn, Guo, & Furstenberg, 1993; Mare, 1980; Sandefur, McLanahan, & Wojikiewice, 1992; Wolfe & Spaulding, 1991). Mothers' education is also a strong predictor of their expectations of children's educational achievement, and mothers with college education have the strongest expectations.

Second, this study finds that female children have better academic performance. Therefore, further analyses have been conducted to examine if mothers' assets and expectations have different effects on boys than on girls. The results indicate that mothers' have the same strong effects on both boys and girls. Mothers' home ownership, however, has stronger effects on girls than on boys. This supports the notion that the positive effects of assets may be particularly strong for girls and women (Sherraden, Page-Adams, & Yadama, 1995) and is consistent with some previously findings (Hill & Duncan, 1987).

Third, number of adults living in household has negative effects on children's outcomes and mothers' expectations. It could be that different types of adults living in households may have different effects on children. For example, grandparents might help single mothers with household tasks and supervision of children. On the other hand, partners may compete with children for the mother's time. The effects of other adults in the household may also depend on their health status, employment status, and other conditions. Future research should examine how different living arrangement of single mothers (e.g. living alone, living with parents, cohabiting, living with other adults) affects children and mother-child interactions in female-headed households.

Finally, mothers' employment status does not have a significant impact on children's outcomes. However, it has negative and significant effects on their expectations for children's educational achievement. This finding is contrary to the argument that employed mothers tend to have positive attitudes, motivation, and expectations to their children (Parcel & Menagham, 1997). However, it is also true that wages and job environments may influence the positive attitudes that are related to employment (Menagham & Parcel, 1995). Low-income single mothers are more likely to have low-wage jobs that offer little hope for advancement. This may contribute to the low expectations of these mothers for their children. Also, employed mothers may have more responsibilities, which may lead to less time with their children, and this in turn may lead to low expectations of their children.

Implications

The findings of positive effects of assets on parental expectations and children's educational outcomes lend support for policies that promote asset accumulation as a strategy to protect poor women and their children. In addition to approaches of income supplementation and human capital development, efforts to enhance the well-being of single mothers and their children should perhaps also focus on helping them build economic assets.

Policies and programs designed to promote asset accumulation have increased during the past decade. In particular, Individual Development Accounts (IDAs) have been used as a community development and public policy tool. IDAs are special savings accounts that are designed to help

people of low-income build assets for increased self-sufficiency and long-term economic security. Account holders receive matching funds as they save for purposes such as buying a first home, job training, going to college, or starting a small business (Sherraden, 1988, 1991). IDAs are included as a state option in the 1996 federal "welfare reform" law. Two national IDA demonstrations are underway; one is a foundation-supported project known as the "American Dream Demonstration", which began in 1997, and the second is the federally-funded Assets for Independence Act which became law in 1998. Some states have included IDAs as part of their state welfare reform plans and allow TANF funds to be used for IDAs. At least 29 states have passed IDAs or related legislation designed to enable low-income residents to save, and other states have created IDAs via administrative decisions; altogether, over 40 states now have an IDA program of some type (Center for Social Development, 2002).

However, IDA and similar asset-building programs for the poor are at this time relatively small. Though funding may be from federal and/or state governments, IDA programs are currently community-based projects serving tens or hundreds of people each, and no state has more than a few thousand IDA participants. Much is being learned in this demonstration phase, but this is not an implementation model that can go to large-scale. To create a significant impact in asset accumulation by the poor, it will be necessary to increase the number of IDA participants substantially. This would require a large-scale public policy that makes asset-based policy widely available and efficient. Based on the results of this study, such policy should perhaps be designed especially to encourage and support IDAs or other asset accumulation strategies for low-income mothers with children.

References

Aaronson, D. (2000). A note on the benefits of homeownership. *Journal of Urban Economics* 47: 356-369.

Alwin, D., & Thornton, A. (1984). Family origins and the schooling process: Early versus late influence of parental characteristics, *American Sociological Review* 49: 784-802.

Astone, N., & McLanahan, S. (1991). Family structure, parental practice, and high school completion. *American Sociological Review* 56 (3): 309-320.

Axinn, W., Duncan, G., & Thornton, A. (1997). The effects of parents' income, wealth, and attitudes on children's completed schooling and self-esteem. In *Consequences of Growing Up Poor*, Edited by G. Duncan and J. Brooks-Gunn. New York: Russell Sage Foundation.

Becker, G. S. (1993). *Human capital: A theoretical and empirical analysis, with special reference to education*. Chicago: University of Chicago Press,

Becker, G. S. (1991). *A Treatise on the family*. Cambridge, MA: Harvard University Press.

Becker, G. S., & Tomes, N. (1986). Human capital and the rise and fall of families. *Journal of Labor Economics* 43: PS1-PS39.

Becker, G. S., & Tomes, N. (1979). An equilibrium theory of the distribution of income and intergenerational inequality. *Journal of Political Economy* 87: 1153-89.

Bernheim, B. & Garrett, D. (1996). The determinants and consequences of financial education in the workplace: Education from a survey of households (Working Paper No. 5667). Cambridge, MA: National Bureau of Economic Research.

Brooks-Gunn, J., Guo, G., & Furstenberg, F. (1993). Who drops out and who continues beyond high school. A 20-Year study of black youth. *Journal of Research in Adolescence* 3 (37), 271-94.

Center for Social Development (2002). State IDA profiles. Available [Online]: *http://gwbweb.wustl.edu/Users/csd/ida/stateIDAprofiles.html/*

Cheng, L., & Page-Adams, D. (1996). Education, assets and intergenerational well-being: The case of female headed families (Working paper No. 96-3). St. Louis: Center for Social Development, Washington University.

Cho, Y.N. (1996). The effects of assets on the economic well-being of women after marital disruption (Working Paper No. 99-6). St. Louis: Center for Social Development, Washington University.

Cogineni, A., Alsup, R. & Gillespie, D. F. (1995).Mediation and moderation in social work research. *Social Work Research* 19 (1): 57-63.

Cohen, J. (1987). Parents as educational models and definers. *Journal of Marriage and the Family* 49: 339-351.

Coleman, J. (1988). Social Capital in the creation of human capital. *American Journal of Sociology* 94 (Supplement): S95-S120.

DiPasquale, D., & Glaeser, E. L. (1999). Incentives and social capital: Are homeowners better citizens? *Journal of Urban Economics* 45: 354-384.

Duncan, G., Brooks-Gunn, J., & Klebanov, P. (1994). Economic deprivation and early childhood development. *Childhood Development* 65: 296-318.

Essen, J., Fogelman, K., & Head, J. (1977). Childhood housing experiences and social achievements. *Child care, Health and Development* 4: 41-58.

Furstenberg, F.F. (1990). Divorce and the American family. *Annual Review of Sociology* 16: 379-403.

Furstenberg, F., & Hughes, M. (1995). Social capital and successful development among at-risk youth. *Journal of Marriage and the Family* 57: 580-592.

Garfinkel, I., & McLanahan, S. (1986). *Single mothers and their children: A new American Dilemma*. Washington. DC: Urban Institute Press.

Green, R., & White, M. (1997). Measuring the benefits of homeowning: Effects on children, *Journal of Urban Economics* 41: 441-461.

Hanson, T., McLanahan, S., & Thomson, E. (1997). Economic resources, parental practices, and children's well-being. In G. Duncan and J. Brooks-Gunn, eds., *Consequences of Growing Up Poor*. New York: Russell Sage Foundation.

Hauser, R. & Featherman, D.L. (1976). Equality of Schooling: Trends and prospects. *Sociology of Education* 49: 99-120.

Hauser, R., & Phang, H.S. (1993). Trends in high school dropout among White, Black, and Hispanic youth, 1973-1989 (Discussion Paper No. 1007-93). Madison, Wisconsion: Institute for Research on Poverty, University of Wisconsin.

Haveman, R., & Wolfe, B. (1994). *Succeeding generations: On the effects of investment in Children*. Russell Sage Foundation: New York.

Henretta, J. (1984). Parental status and child's home ownership. *American Sociological Review* 49: 131-140.

Hill, M., & Duncan, G. (1987). Parental family income and the socioeconomic achievements of children. *Social Science Research* 16: 39-73.

Kane, T. J. (1994). College entry by blacks since 1970: The role of college costs, family background, and the returns to education. *Journal of Political Economy* 102: 878-907.

Lewis, O. (1966). The culture of poverty. *Scientific American* 215: 19-25.

Lunt, P. K., & Livingstone, S.M. (1992). *Mass consumption and personal identity: Everyday economic experience*. Philadelphia, PA: Open University Press.

Mare, R. (1980). Social background and school continuation decisions. *Journal of the American Statistical Association* 75 (370): 295-305.

Mayer, S. (1997). *What money can't buy: Family income and children's life chances*. Cambridge, MA: Harvard University Press.

McLanahan, S. (1985). Family structure and the reproduction of poverty. *American Journal of Sociology* 90: 873-901.

McLanahan, S. (1997). Parent absence or poverty: Which matters more? In G. J. Duncan & J. Brooks-Gunn, eds., *Consequences of growing up poor* (pp. 35-48). New York: Russell Sage Foundation.

McLanahan, S., & Sandefur, G. (1994). *Growing up with a single parent: What hurts, what helps*. Cambrigdge, MA: Harvard University Press.

Mead, G.H. (1934). *Mind, Self, and Society*. Chicago: Chicago University Press.

Morrow-Howell, N., & Proctor, E. (1992). The use of logistic regression in social work research. *Journal of Social Service Research* 16 (1-2): 87-104.

Murray, C. (1984). Losing ground. New York: Basic Books.

Nichols-Casebolt, A., & Krysik, J. (1997). The economic well-being of never-and ever-married single mother families: A cross-national comparison. *Journal of Social Service Review* 23 (1): 19-40.

Oliver, M. L., & Shapiro, T. M. (1995). *Black Wealth/White Wealth: A new Perspective on Racial Inequality.* New York: Routledge.

Parcel, T. L., & Menaghan, E. G. (1997). Effects of low-wage employment on family well-being. *The Future of Children* 7: 116-121.

Page-Adams, D., & Sherraden, M. (1997). Asset building as a community revitalization strategy. *Social Work* 42 (5): 423-434.

Pritchard, M., Myers, B., & Cassidy, D. (1989). Factors associated with adolescent saving and spending patterns. *Adolescence* XXIV (95) : 711-723.

Ramanathan, R. (1995). *Introductory Econometrics with applications.* The Dryden Press.

Richards, L., & Schmiege, C. (1993). Problems and strengths of single parent families. *Family Relations* 42: 279-85.

Rossi, P. H., & Weber, E. (1996). The social benefits of homeownership: Empirical evidence from national surveys. *Housing Policy Debate* 7 (1): 1-35.

Sandefur, G., McLanahan, S., & Wojikiewicz, R. (1992). The effects of parental marital status during adolescence on high school graduation. *Social Forces* 71 (1) : 103-121.

Scanlon, E. (2001). Toward a theory of financial savings and child well-being: Implications for research on a Child and Youth Savings Account Policy Demonstration (Research Background Paper, CYSAPD 01-11). St. Louis: Center for Social Development, Washington University.

Scanlon, E., & Page-Adams, D. (2001). Effects of assets on families and children. In R. Boshara, ed., *Building Assets.* Washington: Corporation for Enterprise Development.

Scheuler-Whitaker, L. & Pandey, S (1998). Individual, Family and Neighborhood Influences on Teen Childbearing: A Life Options Approach (Working Paper No. 98-5). St. Louis: Center for Social Development, Washington University.

Shaw, L. B. (1982). High school completion for young women: Effects of low income and living with a single parent. *Journal of Family Issues* 3: 147-63.

Sherraden, M. (1988). Rethinking social welfare: Toward assets. *Social Policy* 18(3): 37-43.

Sherraden, M. (1991). *Assets and the poor: A new American welfare policy.* Armonk, NY: M.E. Sharpe

Sherraden, M., Page-Adams, D., & Yadama, G. (1995). Assets and the welfare state: Policies, proposals, politics and research. *Research in Politics and Society* 5: 241-268.

Shobe, M., & Page-Adams, D. (2001). Assets, future orientation and well-being: Exploring and extending Sherraden's framework. *Journal of Sociology and Social Welfare* XXVIII (3): 109-127.

Smith, M. H., Beaulieu, L. J., & Seraphine, A. (1995). Social capital, place of residence and college attendance. *Rural Sociology* 60 (3): 363-380.

U.S. Bureau of the Census (1961). Statistical abstract of the U.S. Washington, DC: U. S. Government Printing Office.

U.S. Bureau of the Census (2000). Statistical abstract of the U.S. Washington, DC: U. S. Government Printing Office.

U.S. Bureau of the Census (2001). People and Families in Poverty by Selected Characteristics: 1999 and 2000. Retrieved from: *http://www.census.gov/hhes/poverty/poverty00/tables00.html.*

Whitback L., et al. (1991). Family economic hardship, parental support, and adolescent self-esteem. *Social Psychology Quarterly* 54 (4) : 353-363.

Wilson, W. (1987). *The Truly Disadvantaged: The Inner city, the Underclass, and Public Policy.* Chicago: The University of Chicago Press.

Wolff, E. N. (1995). *Top Heavy: A study of the Increasing Inequality of Wealth in America.* New York: Twentieth Century Fund Press.

Yadama, G.N., & Sherraden, M. (1996). Effects of assets on attitudes and behaviors: advance test of a social policy proposal. *Social Work Research* 20 (1): 3-11.

U.S. Department of Education
Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)

ERIC Educational Resources Information Center

REPRODUCTION RELEASE

(Specific Document)

UD 035 570

I. DOCUMENT IDENTIFICATION:

Title: Effects of Mothers' Assets on Expectations & Children's Educational Achievement in Female-Headed Households	
Author(s): Min Zhan and Michael Sherraden	
Corporate Source: Center for Social Development, Washington University - George Warren Brown S.S.W.	Publication Date: May 2002

II. REPRODUCTION RELEASE:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, *Resources in Education* (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to each document.

If permission is granted to reproduce and disseminate the identified documents, please CHECK ONE of the following three options and sign at the bottom of the page.

The sample sticker shown below will be affixed to all Level 1 documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

SAMPLE

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

1

Level 1

☒

Check here for Level 1 release, permitting reproduction and dissemination in microfiche or other ERIC archival media (e.g., electronic) *and* paper copy.

The sample sticker shown below will be affixed to all Level 2A documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE, AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY, HAS BEEN GRANTED BY

SAMPLE

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

2A

Level 2A

☐

Check here for Level 2A release, permitting reproduction and dissemination in microfiche and in electronic media for ERIC archival collection subscribers only

The sample sticker shown below will be affixed to all Level 2B documents

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY

SAMPLE

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

2B

Level 2B

☐

Check here for Level 2B release, permitting reproduction and dissemination in microfiche only

Documents will be processed as indicated provided reproduction quality permits.
If permission to reproduce is granted, but no box is checked, documents will be processed at Level 1.

I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate these documents as indicated above. Reproduction from the ERIC microfiche or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries.

Sign here, please

Signature: Michael Sherraden	Printed Name/Position/Title: Michael Sherraden / Director / Ph.D.
Organization/Address: George Warren Brown School of Social Work C.S.D / Washington University - Campus Box 1196 / 1 Brookings Drive St. Louis, MO 63130	Telephone: 314-935-6691 FAX: 314-935-8661
	E-Mail Address: Sherrad@gwbmail.wustl.edu Date: 3/17/03

III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, *or*, if you wish ERIC to cite the availability of these documents from another source, please provide the following information regarding the availability of these documents. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

Publisher/Distributor:
Address:
Price:

IV. REFERRAL OF ERIC TO COPYRIGHT/REPRODUCTION RIGHTS HOLDER:

If the right to grant this reproduction release is held by someone other than the addressee, please provide the appropriate name and address:

Name:
Address:

V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse: **ERIC Clearinghouse on Urban Education**
Teachers College Box 40, Columbia University
525 West 120th Street
New York, New York 10027-6696